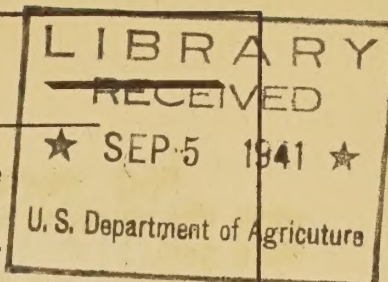


1.932
A2N47

news letter

Issued monthly by the
Bureau of Agricultural Chemistry and Engineering of the
U. S. Department of Agriculture. *Not for publication.*



Vol. 3.

August, 1941

No. 2.

GENERAL ADMINISTRATION

On August 1, 1941 Congress passed the following amendment to the Classification Act of 1923:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Classification Act of 1923, as amended, is hereby further amended as follows:

Sec. 2. Section 7 of the said Act is hereby amended by inserting the letter "(a)" after the figure "7" at the beginning of said section, and by adding the following paragraphs as subsections thereof:

"(b) All employees compensated on a per annum basis, and occupying permanent positions within the scope of the compensation schedules fixed by this Act, who have not attained the maximum rate of compensation for the grade in which their positions are respectively allocated, shall be advanced in compensation successively to the next higher rate within the grade at the beginning of the next quarter, following the completion of: (1) Each eighteen months of service if such employees are in grades in which the compensation increments are \$60 or \$100, or (2) each thirty months of service if such employees are in grades in which the compensation increments are \$200 or \$250, subject to the following conditions:

"(1) That no equivalent increase in compensation from any cause was received during such period, except increase made pursuant to subsection (f) of this section;

"(2) That an employee whose rate of compensation is below the middle rate of the grade shall not be advanced unless his current efficiency is good or better than good;

"(3) That an employee whose rate of compensation is at or above the middle rate of the grade shall not be advanced unless his current efficiency is better than good;

"(4) That the service and conduct of such employee are certified by the head of the department or agency or such official as he may designate as being otherwise satisfactory.

"(c) The term 'good' as used herein shall be defined in accordance with the systems of efficiency rating established pursuant to section 9 of this Act.

"(d) For the purpose of this section, the fourth salary rate in grades 2 and 3 of the custodial service shall be considered the middle rate.

"(e) Employees eligible under subsection (b) for compensation advancement by reason of service immediately preceding the effective date of this amendment shall be advanced to the next higher rate of compensation within the grade to which their positions are respectively allocated at the beginning of the next quarter immediately following the effective date of this amendment.

"(f) Within the limit of available appropriations, and in recognition of especially meritorious services, the head of any department or agency is authorized to make additional within-grade compensation advancements, but any such additional advancements shall not exceed one step and no employee shall be eligible for more than one additional advancement hereunder within each of the time periods specified in subsection (b). All actions under this subsection and the reasons therefor shall be reported to the Civil Service Commission. The Commission shall present an annual consolidated report to the Congress covering the numbers and types of actions taken under this subsection.

"(g) The President is hereby authorized to issue such regulations as may be necessary for the administration of this section.

"(h) The provisions of subsections (b) to (f), both inclusive, of this section shall not apply to the compensation of persons appointed by the President, by and with the advice and consent of the Senate."

Sec. 3. Section 9 of the said Act is hereby amended by adding thereto the following paragraph:

"The Civil Service Commission and heads of departments are authorized and directed to take such action as will apply the provisions of this section uniformly to all employees occupying positions within the compensation schedules fixed by this Act as nearly as is practicable."

Sec. 4. Section 13 of the said Act is hereby further amended so as to provide the following annual rates of compensation and salary steps within grades 14 and 15 of the clerical, administrative, and fiscal service and grades 7 and 8 of the professional and scientific service:

"Clerical, administrative, and fiscal service:

"Grade 14: \$6,500, \$6,750, \$7,000, \$7,250, \$7,500.

"Grade 15: \$8,000, \$8,250, \$8,500, \$8,750, \$9,000

"Professional and scientific service:

"Grade 7: \$6,500, \$6,750, \$7,000, \$7,250, \$7,500.

"Grade 8: \$8,000, \$8,250, \$8,500, \$8,750, \$9,000."

Sec. 5. (a) Title II of the Act of November 26, 1940, entitled "An Act extending the classified executive civil service of the United States," is hereby amended by deleting from section 3(d) (viii) the words "verifiers, openers, packers, guards, inspectors, station inspectors" so that the paragraph as amended will read as follows:

"(viii) Offices or positions of clerks and laborers in the Customs Service of the Treasury Department, the compensation of which is fixed under an Act of Congress approved May 29, 1928 (45 Stat. 955), as amended,"

(b)"Upon the passage of this Act, the Secretary of the Treasury shall allocate to the services and grades of the compensation schedules of the Classification Act of 1923, as amended, the other positions heretofore covered by said Act of May 29, 1928, in the same manner as other positions in the field service of the Treasury Department are allocated under section 2 of the act of July 3, 1930 (46 Stat. 1003).

(c) Nothing contained in this section shall be construed to decrease the existing compensation of any employee, but when his position shall become vacant it shall be filled in accordance with the regular compensation schedule applicable to such position.

Sec. 6. Section 3 of the Legislative Pay act of 1929 is hereby amended effective on the date of the enactment of this Act by adding at the end of the first paragraph thereof, before the period, the following: Provided further, That the compensation of any employees under the Office of the Architect of the Capitol whose tenure of employment is temporary or of uncertain duration may be fixed by the Architect of the Capitol without reference to the provisions of the Classification Act of 1923, as amended."

Sec. 7. There are hereby authorized to be appropriated such sums as may be necessary to carry the provisions of this Act into effect.

Sec. 8. Insofar as they are inconsistent or in conflict with prior laws, the provisions of this Act shall control.

Sec. 9. This Act shall take effect on July 1, 1941.

* * *

S. H. McCrory recently returned from an extended trip through the Western States during which he conferred with the following members of the Bureau regarding the work under their charge.

B. M. Stahl - grain storage work at Jamestown, N. Dak.
W. M. Hurst - fiber flax investigations, Corvallis, Ore.
W. V. Hukill - apple storage problems in the Okanogan-Wenatchee area.
W. R. Swanson - grain storage work, Hutchinson, Kansas.
E. M. Mervine - sugar beet machinery investigations.
Ft. Collins, Colo.
A. D. Edgar - potato storage work, Scottsbluff, Nebr.

He also conferred with representatives of the fiber flax industry at Port Huron, Mich., and with officials of the University of Wisconsin at Madison regarding farm housing studies.

At the request of the Fish and Wild Life Service of the Department of the Interior Mr. McCrory inspected refuges at Klamath Falls, Ore. and Socorro, N. Mex.

At Ames, Iowa, he conferred with Dean T. R. Agg regarding the cooperative work with the Iowa Agricultural College.

* * *

AGRICULTURAL CHEMICAL RESEARCH

H. S. Paine, Chief of Division, spent several days in Georgia and Florida consulting with cooperators and members of the Bureau staff regarding investigations of the Bureau on tung oil and by-products and utilization of sweetpotatoes for cattle feed.

Sam Byall left Washington the first of August, to assist with phases of the carbohydrate investigation work of the Bureau at Meridian, Miss., having direct reference to sorgo and sugarcane sirups and sugar. Mr. Byall will remain at Meridian approximately three months.

A trip was made by R. M. Kingsbury recently to points in New York, Pennsylvania and Illinois to survey plants available for the dehydration of vegetables.

Members of this Division now serving on the Dehydration Committee, with headquarters at Albany, Calif., include: E. M. Chace, of the Los Angeles Laboratory, Chairman of the Committee; H. W. von Loesecke of the Winter Haven, Fla., Laboratory; and Dr. C. E. Sando of Washington. It is expected that this special dehydration work will continue for six to nine months.

The Dehydration Committee and Dr. Swenson of the Western Regional Research Laboratory recently conferred with Acting Dean Freeborn, Dr. Cruess and Mr. Mrak of the University of California, together with Mr. Walker, engineer in charge of agricultural engineering at the Experiment Station at Davis, Calif., on the general field of dehydration, in view of securing collaboration with the University in the project.

While on the West Coast recently, to assist with the organization of the dehydration work at Albany, Calif., Mr. Hollingshead, Assistant Chief of the Division, visited the Los Angeles Laboratory and conferred with members of that station regarding their program of work. A visit was also made, in company with E. M. Chace and Dr. E. A. Beavens, of the Los Angeles Laboratory, to the Holly Sugar Company at Santa Ana, Calif. This factory is working on beets brought from the Imperial Valley some 250 miles away. The feasibility of producing dried beet slices or shreds in the Imperial Valley for use at the Santa Ana plant, thus saving freight on 1,500 pounds of water out of every ton of beets, was discussed.

Among the recent visitors to the Los Angeles, Calif. Laboratory were: Mr. Van Arsdel of the Western Regional Research Laboratory, engineer member of the Dehydration Committee; C. C. Nolder of the National Dehydration Co., which is installing a large dehydrating unit at National City, Calif., consisting of tunnel driers, spray driers, and rotary kilns; W. F. Wight, formerly in charge of the Bureau of Plant Industry orchard at Palo Alto, Calif. who discussed the canning of peach hybrids which he developed at Palo Alto;

Dr. Roger Truesdail, head of a local consulting and nutritional laboratory; and E. J. Draper, chemist of the Tree-Sweet Company of Santa Ana, Calif.

Refrigeration equipment in the new laboratory extension at Winter Haven, Fla., is now in working order, which completes the extension of the building and installation of the new equipment.

On July 28 George N. Pulley of the Winter Haven Laboratory was called to Tampa to cooperate with the Agricultural Marketing Service on certain peach-packing problems in connection with national defense.

Among recent visitors to the Winter Haven, Fla., Laboratory were W. C. Scott of the Weslaco, Texas, Station and Dr. P. A. Wells of the Eastern Regional Research Laboratory.

Visitors to the Gainesville, Fla. Tung Oil Laboratory recently included; F. Edgar Lane, Biology Teacher at the Miami Edison High School; Dr. L. L. Rusoff, Associate Professor of Animal Nutrition of the College of Agriculture of the University of Florida, discussed cooperative poultry feeding experiments with tung press cake, which the Tung Oil Laboratories are carrying on with the University of Florida; Mr. Freeman of the Cosmetic Division of the Food and Drug Administration; Dr. Cecil V. Duffie, a practicing physician of Lakeland, Fla., who discussed the work that the laboratories have been carrying on with the National Institute of Health regarding possible medical value of tung oil and tung juice; Dr. P. A. Wells, Director, Eastern Regional Research Laboratory; C. F. Speh, Chief, Naval Stores Research Division; G. P. Shingler, Naval Stores Field Laboratory at Olustee, Fla. and Doctors G. F. Potter and F. S. Lagasse of the Bogalusa, La., and Gainesville, Fla., tung investigation laboratories of the Bureau of Plant Industry, who discussed plans for cooperative tung studies between the Bureau of Plant Industry and this Bureau for 1941-42 fiscal year.

W. C. Scott, of the Weslaco, Texas, field station has been appointed chemist in charge of the station, succeeding J. L. Heid, who has accepted a position with a by-products company in California. Mr. Scott has been connected almost continuously with the Laboratory since the Laboratory was established in 1932, for the primary purpose of helping fruit and vegetable growers realize greater returns from their crops. The Laboratory has been working directly with canners and other food processors, helping them to improve their products and to manufacture new products that will offer outlets to the grower for their surplus agricultural commodities.

Messrs. Hunt and Steel of the DuPont Company recently visited this Division, and discussed studies of packaging and use of cellophane.

Messrs. R. B. Willson, Vice President of the John G. Paten Co., New York City, and Ernest R. Root, Chairman of Board, The A. I. Root Co., Medina, Ohio, visited the Honey Investigations Laboratory in connection with the Food and Drug Administration public hearings on "honey Bread."

Representing the American Honey Institute, Mr. Willson headed a committee consisting of Messrs. Root, J. I. Hambleton, in charge of the Division of Bee Culture, Bureau of Entomology and Plant Quarantine, H. J. Clay, Agricultural Marketing Service, G. P. Walton of this Division, which presented views of American honey producers at the hearings.

- - -

K. C. Beeson, formerly of this Bureau and now with the Bureau of Plant Industry Regional Laboratory at Ithaca (Cornell), was a recent visitor to the Cereal Section. Mr. Beeson is still engaged in the study of the factors which influence the mineral and vitamin content of crops and their relation to animal well being.

- - -

Professor J. Gilbert White of Madison College, Madison, Tenn., Lecturer on Nutrition, discussed enriched bread with members of the Cereal Section recently.

- - -

Dr. M. L. Wilson, Director of Extension, gave a unique luncheon on August 5, making use of the facilities of the baking laboratory of the Cereal Section. Sam Siegel of Brooklyn, an expert in the preparation of soybean foods, served a full course meal - soup, meat substitute, stuffed sweetpotatoes, salad, milk, bread, cookies, crackers, butter, chocolate spread, etc. all of which consisted wholly or in part of soybeans. Among Dr. Wilson's guests were Dr. Louise Stanley and Dr. Hazel K. Stiebling of the Bureau of Home Economics, Dr. Helen Mitchell and Miss Vaughn of the Federal Security Agency, Miss Sue Taylor of Farm Security Administration, Mr. Dole of Surplus Marketing Administration, W. F. Morse of the Bureau of Plant Industry, H. W. Hochbaum of Extension Service, and J. A. LeClerc of this Division.

- - -

Dr. W. H. Strowd, Secretary of the Soft Wheat Millers Association, Nashville, Tenn., conferred with members of the Cereal Section.

* * *

FARM MECHANICAL EQUIPMENT RESEARCH

W. R. Humphries left Washington August 12 in company with A.L. Mehring of the Bureau of Plant Industry, to confer with representatives of industry and others in connection with shipping facilities available at fertilizer plants in the vicinity of Baltimore, Md., Philadelphia, Pa., Wilmington, Del., Carteret, N.J., New York City, Middletown, Conn., and Boston, Mass. Mr. Humphries expects to return to Washington August 26.

- - -

A. T. Holman left Washington August 3 to study the equipment set up on several of the Farm Security Administration projects in Louisiana, Arkansas, and Texas.

- - -

Construction of the laboratory and shop building for the Agricultural Engineering section of the Bureau at the Beltsville Research Center has been started. They will be used to continue the work of the fertilizer placement project that is now being carried on at the Arlington Experiment Farm. It is expected that the building will be ready for occupancy in about four months.

- - -

R. M. Ramp made a 5-day trip to Delaware, Maryland, Virginia, and North Carolina in connection with fertilizer placement studies. He reports that the experimental crops on the Eastern Shores of Maryland, Delaware, and Virginia are slow in maturing but are growing satisfactorily. Considerable injury to stand was noticed in the cantaloupe experiment where superphosphate was placed under the seed.

- - -

On July 11 Frank Irons was in Washington to consult with Bureau officials relative to the work at the Toledo Station. The following Bureau of Entomology and Plant Quarantine officials were also interviewed regarding mechanical control equipment: S. A. Rohwer, P. N. Annand, C. M. Packard, W. H. White, B. M. Gaddis, and R. A. Roberts. Mr. Irons returned to Toledo on Saturday. Mr. Irons spent several days during July at Beaver Dam, Wis., advising and assisting the pea aphid control agencies in setting up apparatus for testing the abrasive effect of different insecticide dusts on dusting equipment.

- - -

A. H. Graves and L. B. McCurdy of the Toledo station assisted in a cooperative project with the Agricultural Engineering Department, Ohio State University, to determine the efficiency and power requirements of combine harvesters at different stubble heights. These studies were instituted as a part of the program of studies dealing with collecting and preparing for shipment of crop residues for industrial utilization.

- - -

I. F. Reed reports that construction work on the garage and shop at the Farm Tillage Machinery Laboratory at Auburn is progressing nicely. Most of the brick work is now up to ceiling height.

- - -

The catch basins for the soil plots for infiltration studies at the Tillage Laboratory, Auburn, Ala., have been completed. This work was in cooperation with the Soil Conservation Service.

- - -

John W. Randolph reports an attendance of some 200 farmers and agricultural workers, farm machinery representatives, and others at the Laurel Starch Plant's Farm Machinery Field Day at Laurel, Miss., August 7. In the forenoon a number of speeches were made dealing with different phases of the work including one by Mr. D.F.J. Lynch of the Southern Regional Research Laboratory. A variety of agricultural field machines was on exhibit including the two-row sweetpotato slip transplanter and the bagging carts to aid in harvesting the potatoes developed under Mr. Randolph's direction.

- - -

Sugar beet machinery developments under the direction of E.M. Mervine and S. W. McBirney of the Bureau have reached the point where commercial manufacturers are getting ready to go into production. One large implement manufacturer is now building several sugar beet harvesters for use during the 1941 season. Pre-harvest season trials are now being observed by E. M. Mervine, in Colorado.

* * *

NAVAL STORES RESEARCH

On July 16, C. F. Speh left for a trip to a number of points in the South on matters pertaining to work of the Naval Stores Research Division. He held conferences with representatives of the Georgia Extension Service, the Alabama State Forest Service, Georgia School of Technology, U. S. Forest Service, Naval Stores producers and factors, and with Dr. Torsten Hasselstrom of the G & A Laboratories; he inspected the work of the Naval Stores Station and conferred with its staff; he also visited the Filtered Rosin Products Company and the Hercules Powder Company at Brunswick, Ga. On his return trip from the Naval Stores Station he was accompanied by Dr. P. A. Wells, Director of the Eastern Regional Research Laboratory.

On August 6, Mr. Speh visited New York City, to confer with a number of naval stores dealers regarding sources of supply for materials for the British Purchasing Commission.

A mimeographed article entitled "A Comparison of the Effects of Slash and Longleaf Gums on Cup Materials," by Ray V. Lawrence, (ACE-101) was issued in August.

Ninety-four Future Farmers and Boy Scouts of America, 4-H Club members and vocational agricultural students from various parts of Florida visited the Naval Stores Station July 22, 23, and 24. These students were selected on the basis of accomplishments and scholarship. They visited the Station in groups on alternate days under the leadership of Joe R. Gramling of the Florida Forest and Park Service. The students were shown the operation of the fire still, the gun cleaning equipment, and the museum. Students of these groups have been coming to the Station for the past seven years.

* * *

FARM STRUCTURES RESEARCH

Myron G. Cropsey, who was stationed at Fargo, N. Dak. doing work on wheat and potato storage, has been called to military duty as an officer in the Reserve Corps. He will be temporarily stationed at Ft. Snelling, Minn.

B. M. Stahl who was recently transferred to the field, reports that 170 bins have been erected and filled at Jamestown, N. Dak., and the bins at Hutchinson, Kans. are nearly completed.

* * *

PROCESSING OF FARM PRODUCTS RESEARCH

Cotton Ginning Investigations:

On July 16 and 17 the Laboratory was host to over 80 Missouri ginnermen and farmers comprising a motorcade under the leadership of Dr. J. R. Paulling, Extension Specialist, Columbia, Mo. The engineering and technological staffs of this Bureau and the Agricultural Marketing Service gave talks and conducted

inspection trips through the Laboratory, on practical ginning and fiber questions. Prominent seed breeders in the locality entertained the motorcade with barbecues and trips over their plantations. Cooperating with the U. S. Cotton Ginning Laboratory, the Mississippi Delta Branch Experiment Station under the direction of Homer C. McNamara, extended many courtesies to the visitors and conducted tours of inspection.

A number of cotton ginnerers from Arkansas, Mississippi, Alabama and Louisiana brought their individual problems to the Ginning Laboratory in the course of preparation for the coming season. "Long Shot" and "Manhattan" plantations are among those which have been modernizing their gins for more economical seed handling and better ginning.

- - - -
The Farm Credit Administration New Orleans Bank of Cooperatives through its field representative, U. H. Prickett, and President, H. O. Pate, extended an invitation to the Bureau engineers to attend their conference of ginner cooperatives at Clarksdale, Miss. on August 19.

- - - -
The Laboratory-designed cone Rembert fan was operated at the Fletcher and Barnett cotton gin, Indianola, Miss., for the inspection of the Laboratory staff and is being driven by one of the new General Motors diesel engines.

Cotton Packaging Investigations

- - - -
The Ginning Laboratory in making its first full test run of the season on freshly harvested green cotton turned out the first bale that has been ginned in Washington County, Miss. The local newspapers stated "The first bale was praised by cotton men as the best looking first bale received here." This cotton had a staple length of 1 5/32 inches and was of the Delfos 531-B variety which had been planted on April 1. The government drying process was employed in making a good preparation because the Laboratory moisture determinations by the Agricultural Marketing Service technologists showed that the seed contained 20.88 percent moisture and the wagon sample of seed cotton 19.81 percent. The ginning was performed on the 3/80 commercial outfit of the Laboratory by the pressing and packaging section.

- - - -
A number of pilot bales containing 1 cu. ft. of cotton at different densities is being rushed by this section for the Southern Regional Laboratory. Remnant dry fiber obtained from the Agricultural Marketing Service laboratory gin samples is being used to lower the cost of these bales.

- - - -
Local search for structural steel with which to make conversion of a farm plantation gin press into a standard density unit has been proceeding with some success.

- - - -
The 3/80 commercial gin which will be used in the Laboratory on the Bankhead-Jones packaging and pressing work during the fiscal year has been speeded up to 650 r.p.m. for the gin saws, and the Laboratory-design

Rembert cone-type fan has been installed for handling the seed cotton. Different pure-seed-handling systems are being fabricated for ginning tests in pure seed work this fall.

* * *

Fiber Flax Machinery Investigations:

S. H. McCrory inspected work underway on the Project during July. He also inspected two new flax mills recently constructed and observed experimental equipment in operation at other plants.

- - -

Dr. Louis B. Howard of the Western Regional Laboratory was a recent visitor at the Corvallis shop. While there he addressed the Corvallis U.S.D.A. club on the work of the Regional Laboratories.

The 1941 fiber flax crop in Oregon is the largest on record and will exceed processing plant capacity.

* * *

EASTERN REGIONAL RESEARCH LABORATORY

Joseph A. Scott, Chief of the Division of Plans and Service, visited the Eastern Laboratory on August 4 to confer with Dr. Wells and other officials of the laboratory concerning site contracts. Mr. Scott was accompanied by Mr. O'Sullivan, Mechanical Engineer.

- - -

J. W. Stevens, Chief of the Purchase and Property Section, spent the period August 6-9 at the Eastern Laboratory conferring with Geo. P. Wolf and officials of the Purchase and Property Section regarding procurement and purchasing policy and procedure.

- - -

Benjamin Levitt, consulting chemist of Philadelphia, visited the laboratory for consultation on nicotine matters. Mr. Levitt also conferred with members of the Biochemical Division and the Oil and Fat Division on fruit and soap problems.

- - -

On July 26, Dr. H. H. Mottern of the Biochemical Division gave a talk entitled "Apple Juice, 1940 Model" before the Berks-Lehigh Mountain Fruit Growers Association at Boyertown, Pa. This article, written by Truman Nold (National Apple Institute), H. H. Mottern, and J. J. Willaman (Eastern Laboratory) appeared in the Proceedings of the National Apple Institute, 1941.

- - -

An abstract of an article entitled, "The Pyrolysis of Lactic Acid Derivatives. The Conversion of Methyl Alpha-Acetoxypionate into Methyl Acrylate" by Lee T. Smith, C. H. Fisher, W. P. Ratchford, and M. L. Fein (all of the Carbohydrate Division of the Eastern Laboratory) was published in the Abstracts of the Paint, Varnish, and Plastics Section of the American Chemical Society in connection with the meeting of the Society to be held in Atlantic City, N.J., September 8-12.

- - -

A. J. Hereford of the Agricultural Products Laboratories, New Bern, N. C., visited the laboratory on August 11 to confer with staff members concerning nicotine and tobacco problems. Mr. Hereford's company is just starting production in a new nicotine extraction plant recently erected at New Bern.

- - -

E. G. Beinhart and C. W. Murray of the Biochemical Division made a 3-day tour of the Shenandoah Valley and Pennsylvania apple orchards from August 12-14, studying the application and use of fixed nicotine sprays for apple orchards. The Eastern Laboratory is interested in developing nicotine sprays that can replace the metallic poison sprays. Messrs. Beinhart and Murray conferred with the Experiment Station workers at Winchester, Va.; Kearneysville, W. Va.; and Arendtsville, Pa.

- - - -
Dr. Brooks A. Brice of the Analytical and Physical Chemistry Division attended the conference on Spectroscopy and Its Applications held at Cambridge Mass. July 21-23. Dr. Brice also visited the Bell Telephone Laboratories in New York regarding X-ray diffraction equipment for the Eastern Laboratory.

- - - -
Don S. Rathbun, Secretary of the Penn Tobacco Company at Wilkes-Barre, Pa., conferred with the laboratory staff on July 17, concerning tobacco problems.

- - - -
Dr. J. T. Stearn, Chief of the Cotton Chemical Finishing Division of the Southern Laboratory visited the Eastern Laboratory on August 12, to confer with members of the staff regarding defense projects involving the use of cotton.

- - - -
NORTHERN REGIONAL RESEARCH LABORATORY

S. T. Schicktanz attended a meeting at Fargo, North Dakota, and St. Paul, Minn., of experiment station directors and representatives of the Eastern and Western Laboratories, relative to the industrial utilization of potatoes, especially as a source of agricultural motor fuels.

- - - -
J. H. Shollenberger assisted in International Harvester Company experiments of new type implements for the collection of straw at Woodstock, Ill., and interviewed C. E. Swenson of the Borg-Warner Corporation of Rockford, Ill., regarding the problem of cornstalk collection. Mr. Shollenberger and Dr. E. C. Lathrop also witnessed the experimental operation of a baler making round bales of straw, in the vicinity of LaPorte, Ind., under the supervision of the Allis-Chalmers Company. Mr. Shollenberger and J. J. Curtis assisted the Indiana State Experiment Station in straw collection experiments.

- - - -
Dr. Mabel W. MacMasters was at the Agricultural Byproducts Laboratory at Ames, Iowa, where she studied the separation of starch samples from corn at early stages of maturity, to determine chemical and physical changes during growth, and made a study of the effect of preservation of corn by "dry ice," and alcohol solutions, upon the characteristics of the starch to determine conditions under which subsequent samples might be shipped to Peoria from Ames.

- - - -

Dr. O. E. May conferred with members of the staff of the Charles Pfizer Company, New York City, relative to developments of keto-gluconic acids and other fermentation problems, and with Dr. W. J. Sparks of the Standard Oil Development Company relative to research on synthetic rubber and solvent extraction of drying oils. He also visited the Wallerstein Company laboratories in connection with the development of fermentation processes and products originated by this Laboratory, and conferred with officials of the Bureau in Washington.

- - -
Dr. E. C. Lathrop conferred with officials of the Bureau in Washington.

Dr. E. H. Melvin attended the Conference on Spectroscopy and Its Application at Cambridge, Mass.

- - -
The following additions have been made to the technical staff of the Laboratory: Carl B. Kretchmer, Assistant Chemist, and Robert A. Deane, Under Scientific Aide, Starch and Dextrose Division; Everette M. Burdick, Assistant Chemist, Agricultural Motor Fuels Division; Sidney Collender, Assistant Scientific Aide, and William J. Hodin, Under Scientific Aide, Analytical and Physical Chemical Division; Mitchel Penovich, Under Scientific Aide, Engineering and Development Division; and James Irwin, Under Scientific Aide, Oil and Protein Division.

- - -
Dr. Alexander M. Partansky, Dow Chemical Company, Midland, Mich., visited the Laboratory to obtain information on its approach to the problem of utilization of agricultural wastes through fermentation processes.

- - -
Dr. N. G. Heatley, of Oxford University, England, is spending some time at the Laboratory on cooperative studies with the Fermentation Division relating to the production of a bactericidal substance from mold cultures.

- - -
Dr. SubbaRow, Research Director, and Dr. Bohonos and Dr. Piersma, of the Lederle Laboratories, Pearl River, N.Y. discussed fermentation developments with members of the staff of the Fermentation Division.

- - -
Dr. Monir Bahgat, Agricultural Attache of the Royal Egyptian Legation, Washington, D. C., conferred with members of the staff concerning the development of new industrial uses for agricultural products. He was especially interested in the making of alcohol from cereal seeds.

- - -
Dr. Roger H. Lueck, Manager of the Research Department, and L. V. Taylor, Supervisor of Food Inspection and Analysis, of the American Can Company, Maywood, Ill., visited the Laboratory to familiarize themselves with new and modern ideas in laboratory arrangement, construction materials, and building construction and layout. The American Can Company plans to construct a new research laboratory, and selected the Northern Regional Research Laboratory as one of the more modern research institutions to be visited.

- - -

Dr. W. J. Sparks of the Standard Oil Development Company, formerly Chief of the Oil and Protein Division of the Northern Regional Research Laboratory was in Peoria for conferences with Dr. May and members of the Oil and Protein and the Agricultural Residues Divisions.

Members of the Pilot Club of Peoria were taken on a personally conducted tour of the Laboratory.

Other visitors for special consultations with members of the Laboratory staff included the following: Dr. Irvin C. Feustel, and Dr. Geo. H. Brothier, Western Regional Research Laboratory; J. R. Akers, K. D. Waide, and R. B. Mears, of the Aluminum Company of America; O. G. Burch, Director of General Research Laboratory, and R. E. Delaplane, of the Owens-Illinois Glass Company; Dr. H. W. Florey, Oxford University, Oxford, England; Dr. H. M. Vars, Medical School, University of Pennsylvania; W. E. Anklam, Assistant Director of New Products Research, and Edward E. Kuphal, General Mills, Inc.; Ernest Zochau, Chamber of Commerce, Omaha, Nebraska, and Walter Militze, University of Nebraska; L. L. Nederkorn, and Joseph A. Hill, Illinois Art and Craft; Dr. Harry C. Becker, The Texas Co.; J. C. Erickson, St. Joseph Forward Association, St. Joseph, Mo.; Dr. A. A. Nikitin, Tennessee Copper Company; Dr. F. W. Martin, Corning Glass Works; Dr. Morden G. Brown and Dr. Caswell, Grave, II, Washington University, St. Louis; Floyd C. Olson, West Virginia University; Clarence Johnson, Schenley Distillers Corporation; Clinton L. Brooke, National Grain Yeast Corporation; Dr. L. T. Clark, Parke, Davis and Company; W. T. Jackson, Eureka College.

The number of individual visitors to the Laboratory during the months of January, February, March, April, May, and June, 1941, was 280, 336, 352, 406, 309, and 330, respectively, a total of 2,013. In addition, 670 visitors were taken on personally conducted group tours of the Laboratory, making a grand total of 2,675 for the six months' period.

* * *

SOUTHERN REGIONAL RESEARCH LABORATORY

R. J. Cheatham left July 25 for Washington, D. C., for the purpose of coordinating and directing the Bureau's national defense work on cotton and to serve as special adviser to the Chief of the Bureau on cotton problems.

Charles L. Sens spoke at the July meeting of the Louisiana Engineering Society on the subject of "The Relationship of the Engineering Profession to the Textile Industry."

Samuel T. Burley has been transferred to the Cotton Processing Division as Assistant Cotton Technologist from the Agricultural Marketing Service. Mr. Burley received his B. S. degree from Clemson A & M College, Clemson, S. C.

On July 1 the research work formerly done by Agricultural Marketing Service on the fiber properties of cotton was transferred to the Cotton Fiber Research Division. By this transfer the Cotton Fiber Research Division has

acquired the services of three specialists in this field: Dr. Carl M. Conrad, Dr. Enoch Karrer, and T.L.W. Bailey, Jr. Dr. Karrer and Dr. Conrad will report to New Orleans about August 15. Mr. Bailey will report after the completion of cross-sectioning studies which he is now making in collaboration with the Bureau of Plant Industry.

Dr. W. Kyle Ward, Jr., attended Conference C on High Molecular Weight Compounds of the American Association for the Advancement of Science at Gibson Island, Md., July 7 to July 11. Dr. W. M. Scott and Dr. Ward attended Conference D on Structure and Chemistry of Textile Fibers on July 14 to July 18. Dr. W. James Lyons attended Conference F on the subject of X-ray and Electron Diffraction from July 28 through August 1.

Robert T. O'Connor attended the Spectroscopic Conferences at Mississippi Institute of Technology July 21-23, and conferred with various authorities in the field of spectroscopy concerning spectroscopic equipment.

Dr. E. L. Skau and Dr. John D. Guthrie visited the Cotton Field Station of the Bureau of Plant Industry at Knoxville, Tenn., Georgia Experiment Station, and Alabama Experiment Station July 20-24 for conferences relative to obtaining agronomic samples of cottonseed and peanuts for cooperative work to be carried out by the Analytical, Physical Chemical and Physical Division.

W. G. Bickford has been transferred to the Oil, Fat and Protein Division as Associate Chemist. He was formerly a member of the staff of the U. S. Regional Soybean Industrial Products Laboratory.

Dr. Bickford received the Ph. D. degree in Chemistry from Iowa State College, and served as instructor on the faculty there during a period of seven years prior to his appointment to the Soybean Laboratory in 1936.

Since entering the Service, Dr. Bickford's research and publications have been in the field of fats and oils. They include a series of papers on "The Stability of Vegetable Oils."

G. E. Mann has been appointed Assistant Scientific Aide in the Oil, Fat and Protein Division. Mr. Mann received his B. S. from Tulane University, and has completed one year of graduate work.

A. M. Altschul has been appointed Associate Chemist in the Oil, Fat and Protein Division. Dr. Altschul received his Ph. D. degree at the University of Chicago in 1937. Following his graduation, he was appointed to the faculty of the University of Chicago where he was associated with the Spectroscopic Biological Investigations. He has published papers on the purification and oxygen equilibrium of hemoglobin, isolation and purification of cytochrome peroxidase, and on the isolation of a new cytochrome reductase.

Among recent visitors to the laboratory were the following: W. E. Ankham, Assistant Director, New Products Research, and Mr. Edward E. Kuphal, Manufacturing Department of General Mills, Inc., Minneapolis, Minn., and Rene P. Delpech, Chief of the Bureau of Statistics, Argentine National Cotton Board, Argentine Embassy, Washington, D. C.

* * *

DIVISION OF PLANS AND SERVICE

Recently the Division of Plans and Service completed the plans, specifications, and other bidding documents of certain proposed projects for which bids have been received. Fortunately, fairly keen competition brought in favorable bids for times like these when defense programs and priorities impose such a heavy demand on contractors generally. The total amount of contracts awarded was \$1,011, 270, including the following:

Superstructure of 6 greenhouses for the Bureau of Plant Industry at the U. S. Horticultural Station, Beltsville, Md., for \$155,500.00; Agricultural Engineering Laboratory for the Bureau, Beltsville Research Center, Beltsville, Md., for \$45,350.00; frozen foods research laboratory for the Bureau, at Albany, Calif., for \$108,760; constant temperature rooms for the Bureau, at Albany, Calif., for \$33,625.00; automatic attic sprinkler system for the Bureau, at New Orleans, La., for \$5,658.00; headhouse and greenhouse for the Bureau of Entomology and Plant Quarantine, at Beltsville Research Center, Beltsville, Maryland, for \$77,350.00; north and south laboratory buildings, for the Bureau of Plant Industry at U. S. Horticultural Station, Beltsville, Md., for \$585,000.

* * *

PUBLICATIONS APPEARING OUTSIDE THE DEPARTMENT

- BALLS, A. K. and KIES, M. W. (with R. R. THOMPSON, Honolulu Expt. Sta.) Bromelin - properties and commercial production. Indus. and Engin. Chem. 33 (7): 950-953, July, 1941.
- BEINHART, E. G. Tobacco research at the Eastern Regional Laboratory. The Tobacco Leaf 77: 3982-3983, June, 1941.
- CIRCLE, S. J. and SMITH, A.K. The effect of form aldehyde on the iso-electric points of some proteins, determined by microelectrophoresis. Jour. of Phys. Chem. 45(6): 916-930, June, 1941.
- CSONKA, F. A. Amino acid in oats and oat milling products, including rolled oats. Cereal Chem. 18(4): 523-529, July, 1941.
- CUMINGS, G. A. (with J. C. LILL, SA, AND L. A. HURST, Bureau of Plant Industry, and R. M. SALTER, Ohio Agr. Expt. Sta.) Fertilizer placement experiments with sugar beets in Ohio. Sugar Beet Jour. 6(9): 169-175, June, 1941.
- JONES, D. B. AND GERSDORFF, C.E.F. The effect of storage on the protein of wheat, white flour, and whole wheat flour. Cereal Chem. 18(4): 417-434, July, 1941.
- JOSHEL, L. M., HALL, S. A. and PALKIN, S. Determination of unsaturation in the terpene series. Indus. & Engin. Chem. Anal. Ed. 13(7): 447-449. July, 1941.

- KLIEVER, W. H. and BENNETT, C. A. The cotton gin gives up its secrets to stroboscope and camera. The Cotton Ginners' Jour. 12(10): 6-11, July, 1941.
- MCKINNEY, R. S. Problems in the field of tung oil extraction. Oil, Paint and Drug Reporter 140 (4): 5, 33 & 34, July 28, 1941.
- MERVINE, E. M. Field tests of mechanical blocking and thinning of sugar beets. Procs. Amer. Soc. of Sugar Beet Technologists, Vol. 2, pp. 256, 257, & 258, Jan. 3-6, 1940.
- MOTTERN, H. H. and WILLAMAN, J. J. (With T. NOLD, SA, Natl. Apple Inst.) Apple Juice, 1940 model. Report, Seventh Ann. Meeting, Natl. Apple Inst., 1941, pp. 26-31, June 26, 27, 28, 1941.
- SENNER, A. H. Effect of domestic oil burner firing rate on heating costs. Air Conditioning & Oil Heat 14 (7): 14-15, July, 1941.
- Observations on drafts in oil-fired domestic heating plants. Air Conditioning & Oil Heat 14 (8): 16, 18, 60 & 61, Aug. 1941.
- SHINGLER, G. P. and PATTON, E. L. Rosin cleanliness. Oil & Soap 18(6): 133, June, 1941.
- SIMON, J. W. Its cool inside. South. Agr. 71(7): 4, July, 1941.
- SKINNER, W. W. New products for old. Agr. Situation 25 (7): 19-21, July, 1941.
- VELDHUIS, M. K. and ETCHELLS, J. L. (With I. D. JONES & O. VEERHOFF, N.C. Agr. Expt. Sta.) Notes on cucumber salting. Fruit Prods. Jour. & Amer. Vinegar Indus. 20(11): 341-342, July, 1941.

* * *

CHANGES IN PERSONNEL

Recent Appointments - Indefinite or Probationary

Gertrude O. Klatt	Sr. Operative (Asst. Bookkeeper)	Bookkeeping Section
Mrs. Ella J. Winn	Jr. Clerk-Typist (Stoneville, Miss.)	Cotton Ginning Lab.
Dallas Murle Lancaster	Asst. Messenger	Miscel. Ser. & Rec. Sec.
Betty Jane Hanes	Jr. Clerk-Stenog, wae (Urbana, Ill)	Regional Soybean Lab.
William G. Gordon	Associate Chemist	East. Reg. Res. Lab.
Everette M. Burdick	Asst. Chemist	North. Reg. Res. Lab.
Sidney Collender	Asst. Scientific Aide	" " " "
Robert A. Deane	Under Scientific Aide	" " " "
George H. Hickman	Sr. Operating Engineer	" " " "
William J. Hodin	Under Scientific Aide	" " " "
Chester W. Hrapek	Assistant Messenger	" " " "
Orville B. Hunter	Unskilled Laborer	" " " "
James O. Irwin	Under Scientific Aide	" " " "
Carl B. Kretschmer	Assistant Chemist	" " " "
Carl Lowman	Unskilled Laborer (Uncl.)	" " " "
Cleveland L. Adams	Assoc. Cotton Technologist	South. " " "
Aaron M. Altschul	Associate Chemist	" " " "
Henry W. Atkinson	Principal Engr. Draftsman wae (Laurel, Miss)	South. Reg. Res. Lab
Samuel T. Burley	Asst. Cotton Technologist	South. " " "

Julius R. Jung, Jr.	Under Laboratory Helper	South. Reg. Res. Lab.
Virgest J. LaBauve	Unskilled Laborer	" " " "
Godfrey E. Mann	Asst. Scient. Aide(Chem)	" " " "
Mrs. Irene H. Wilson	Jr. Clerk-Stenographer	" " " "
Mrs. Grace S. Bergman	Asst. Clerk-Stenographer	West. " " "
Herbert J. Dutton	Asst. Chemist	" " " "
John H. Hawkins	Skilled Laborer	" " " "
Albert M. Kanzler	Janitor	" " " "
Alvin A. Klose	Assistant Chemist	" " " "
James C. Lewis	Assistant Chemist	" " " "
John P. Nielsen	Associate Chemist	" " " "
Harold S. Olcott	Senior Chemist	" " " "
James D. Ponting	Junior Chemist	" " " "
Edward Rietz	Assistant Chemist	" " " "
Sarah A. Sonnek	Asst. Clerk-Stenog.	" " " "
Charles E. Strum	Sr. Foreman of Laborers	" " " "
John J. van Hoff	Sr. Operating Engineer	" " " "
Clair A. Weast	Junior Chemist	" " " "
John D. Williams	Assistant Messenger	" " " "
Leo E. Holman	Agent(Assoc. Agr. Engr.)(F.C.) (Ames, Iowa)	Farm Struc. Research

- - -

(Recent Appointments - Temporary)

Mrs. Cora Lee Cardwell	Junior Clerk-Typist	Bookkeeping Section
Anna Lee Tusing	Junior Clerk-Stenographer	Enzyme Laboratory
Lucielle B. Ballard	Junior Stenographer	Plans and Service
Florence I. Crosier	Asst. Clerk-Steno(Albany, Calif)	" " "
Eleanor Meriwether	Jr. Clerk-Stenog.(New Orleans, La)	" " "
Willie J. Arnold	Unskilled Laborer (Uncl.)	North. Reg. Res. Lab.
Forrest G. Tolley	" " "	" " " "
Mrs. Yvonne G. Cafiero	Junior Clerk-Stenog.	South. " " "
Mrs. Mildred S. McConnell	Jr. Clerk-Stenographer	" " " "
Mrs. Constance H. Hearn	Junior Clerk-Stenographer	Bookkeeping Section
Fred L. Gayle	Jr. Sugar Technologist	Agr. Chem. Res. Div.

- - -
Separations

Mrs. Nora G. Pegram	Sr. Operative (Resigned)	Bookkeeping Section
Paul Edwards	Agent (Urbana, Ill.)	Farm Struc. Res. Div.
Raymond B. Mitchell	Agent (CC) (Athens, Ga.)	" " " "
Mrs. Alice L. Ring	Jr. Clerk-Stenog.(Scottsbluff, Nebr.)	" " " "
Mrs. Zula G. Caperton	Jr. Clerk-Stenog.(Stoneville, Miss.)	Cotton Ginning Inv.
Ralph R. Struthers	Unskilled Laborer (Uncl.) (Ames, Iowa)	Farm Mech. Equip. Res.
Arthur A. Leavery	Chief Mechanical Draftsman	Plans and Service

Separations (Continued)

Robert D. Fagaly	Under Scientific Helper			
	(Urbana, Ill.) (To War Dept.)	Reg. Soybean Lab.		
Merrill Glen Loos	Unskilled Laborer (Uncl.)			
	(Lincoln, Nebr.)	Rural Elec. Res. Div.		
Margaret M. Brown	Sr. Stenog. (To Interior Dept.)	Reg. Res. Labs.-Adm.		
James E. Kinsella	Unskilled Laborer (Uncl.)*	East. Reg. Res. Lab.		
Elizabeth Austin	Asst. Scientific Aide	North. Reg. Res. Lab.		
Mrs. Louise J. Embree	Jr. Clerk-Stenographer	" " " "		
Benjamin Tabenkin	Assistant Chemist	" " " "		
Eugene F. White	Sr. Operating Engineer	" " " "		
Mrs. Alice L. Weed	Jr. Clerk-Stenographer	South. " " "		
Mrs. Virginia G. Crampton	Jr. Clerk-Stenographer	West. " " "		
James V. Glass	Guard (Albany, Calif.)			
	(To U.S. Quartermaster			
	Supply Depot)	" " " "		
Betty Rosenberg	Jr. Library Assistant	" " " "		
Frederick W. Herms	Guard	" " " "		
Donald M. Conn	Electrician's Helper	North. " " "		

* * *